

# Dialysis

## Vascular Access

### 1. Education of patients and staff

#### CARI Guidelines

a. Staff and patients should be educated about vascular access at an early stage of the disease, in particular about: - preservation of peripheral and central veins  
- how to check for patency  
- the importance of identifying and reporting problems with vascular access  
(level C evidence)

b. Co-morbidity will necessitate involvement of other specialties. They must be aware of the need to preserve peripheral and central veins in renal failure patients. This requires education of patients and both medical and nursing staff. (level C evidence)

## What is the evidence?

No studies available on this subject

## What do the other guidelines say?

**DOQI:** Arm veins suitable for placement of vascular access should be preserved, regardless of arm dominance. Arm veins particularly the cephalic veins of the non-dominant arm, should not be used for venipuncture or intravenous catheters. The dorsum of the hand should be used for intravenous lines in patients with chronic renal failure. When venipuncture of the arm veins is necessary, sites should be rotated. (Opinion)

Instruct hospital staff, patients with developing ESRD (creatinine >3 mg/dL), and all patients with conditions likely to lead to ESRD, to protect the arms from venipuncture and intravenous catheters. A Medic Alert bracelet should be worn to inform hospital staff to avoid IV cannulation of essential veins. (Opinion)

Subclavian vein catheterization should be avoided for temporary access in all patients with chronic renal failure due to the risk of central venous stenosis. (Evidence)

**BRA: No guidelines available**

**CSN:** CSN: Preserve arm veins suitable for placement of vascular access, regardless of arm dominance. Instruct hospital staff and patients with developing ESRD (i.e., serum creatinine > 300 μmol/L) to protect the arms from venipuncture and intravenous catheters (opinion).

## Implementation and Audit

All units should have a pre-dialysis education program

All patients should be offered the program before commencing dialysis

Audit Target - Percentage of patients commencing dialysis that has completed the education program

## **Suggestions for Future Research**

Register evaluation of effectiveness of education program

**OUT OF DATE**